

We claim:

1. A system for determining and transmitting optical lens sizing and prescription data comprising:

- (a) a client central processing unit;
- (b) a computer scanner communicably attached to said client central processing unit;
- (c) a computer input means communicably attached to said client central processing unit;
- (d) a computer output means communicably attached to said client central processing unit;
- (e) first software for determining and transmitting optical lens sizing and prescription data;
- (f) second software for responding to said determined and transmitted optical lens sizing and prescription data;
- (g) a server central processing unit communicably attached to said client central processing unit.

2. The system for determining and transmitting optical lens sizing and prescription data according to claim 1 wherein said server central processing unit is communicably attached to a plurality of client central processing units.

3. The system for determining and transmitting optical lens sizing and prescription data according to claim 1 wherein said first software is executed within said client central processing unit and said second software executed within said server central processing unit.

1 4. The system for determining and transmitting optical lens sizing and prescription data  
2 according to claim 1 further comprising an optical lens representation template, said template  
3 partially comprised of color distinguishable location reference indicators.

1 5. The system for determining and transmitting optical lens sizing and prescription data  
2 according to claim 1 further comprising an optical lens tracing pen.

1 6. The system for determining and transmitting optical lens sizing and prescription data  
2 according to claim 1 wherein said server central processing unit further comprises computer  
3 input and output means.

1 7. The system for determining and transmitting optical lens sizing and prescription data system  
2 of claim 1 wherein said server central processing is communicably attached to an optical lens  
3 processing device.

1 8. The system for determining and transmitting optical lens sizing and prescription data of  
2 claim 1 wherein said server central processing is communicably attached to a plurality of  
3 optical lens processing devices.

1 9. A method for determining and transmitting optical lens sizing and prescription data  
2 comprising:

3 (a) representing an optical lens object onto an optical lens representation template;

- (b) scanning said represented optical lens object with a computer scanning device;
- (c) storing said scanned image within a computer readable memory or file structure;
- (d) retrieving said stored image of said represented optical lens object;
- (e) deriving said optical lens object center coordinates from said scanned image;
- (f) deriving a starting radian of said optical lens object center coordinates from said scanned image;
- (g) centering a retrieved scanned image;
- (h) deriving the radial shape of said optical lens object from said scanned image;
- (i) deriving the size of said derived radial shape of said optical lens object from said scanned image;
- (j) smoothing said derived radial shape;
- (k) identifying and retrieving patient related information from scanned image;
- (l) transmitting said derived optical lens object radial shape, size, center and patent related information from a client central processing unit to a server central processing unit.

10. The method for determining and transmitting optical lens sizing and prescription data according to claim 9, further comprising:
- (a) modifying the size of said derived radial shape; and,
  - (b) altering and displaying a rotatable view of said derived radial shape.

1 11. The method for determining and transmitting optical lens sizing and prescription data  
2 according to claim 9, wherein said representing an optical lens object on an optical lens  
3 representation template further comprises:

4 placing said optical lens object in a generally centered section of said optical lens  
5 representation template;

6 tracing said optical lens object previously placed onto said optical lens shape  
7 representation template with an optical lens tracing pen;

8 removing said optical lens object from said optical lens shape representation template

9 inserting said template into a computer scanner; and

10 scanning said traced optical lens object into a computer accessible memory or file  
11 structure.

12 12. The method for determining and transmitting optical lens sizing and prescription data  
13 according to claim 10, wherein said transmitting of said derived optical lens object radial  
14 shape and size information from a client central processing unit to a server central processing  
15 unit further comprises transmitting client directed information from said server central  
16 processing unit to said client central processing unit.

1 13. The method of claim 9 wherein said transmitting of said information is facilitated via a  
2 computer network.

1 14. A computer program embodied on a computer-readable medium for determining and  
2 transmitting optical lens sizing and prescription data comprising:

3 (a) a code segment for retrieving said stored image of said represented optical lens object;

4 (b) a code segment for deriving said optical lens object center coordinates from said scanned  
5 image;

6 (c) a code segment for deriving a starting radian of said optical lens object center coordinates  
7 from said scanned image;

8 (d) a code segment for centering a retrieved scanned image;

9 (e) a code segment for deriving the radial shape of said optical lens object from said scanned  
10 image;

11 (f) a code segment for deriving the size of said derived radial shape of said optical lens object  
12 from said scanned image;

13 (g) a code segment for smoothing said derived radial shape;

14 (h) a code segment for identifying and retrieving patient related information from scanned  
15 image;

16 (i) a code segment for transmitting said derived optical lens object radial shape, size, center and  
17 patent related information from a client central processing unit to a server central processing  
18 unit.

1 15. The computer program of claim 14 further comprising:

2 (a) a code segment for modifying the size of said derived radial shape; and,

3 (b) a code segment for altering and displaying a rotatable view of said derived radial shape.

1 16. The computer program of claim 14 wherein said program for said transmission of said  
2 information is executed from within a server central processing unit and effectuates the  
3 transmission of client directed information from said server central processing unit to a client  
4 central processing unit.

1 17. The computer program of claim 14 wherein said transmission of said information effectuates  
2 the transmission of said information from said server central processing unit to a plurality  
3 of client central processing units.

1 18. An optical lens tracing pen comprising:  
2 a circular shaped cylinder;  
3 a fine tipped ink pen refill embedded within said cylinder;  
4 an inking tip located on one end of said refill.

1 19. The pen of Claim 18 further comprising a circular shaped cylinder positioned to prohibit said  
2 pen's inking tip from marking if said cylinder is angled beyond said pens marking tolerance.